

Title (en)

ANTIBODIES FOR GENERATING ANTI-INFLAMMATORY MACROPHAGE AND RELATED USES

Title (de)

ANTIKÖRPER ZUR ERZEUGUNG ANTIINFLAMMATORISCHER MAKROPHAGEN UND ENTSPRECHENDE VERWENDUNGEN

Title (fr)

ANTICORPS POUR LA PRODUCTION DE MACROPHAGES ANTI-INFLAMMATOIRES ET UTILISATIONS ASSOCIÉES

Publication

**EP 3349768 A4 20190123 (EN)**

Application

**EP 16847105 A 20160912**

Priority

- US 201562218785 P 20150915
- US 2016051290 W 20160912

Abstract (en)

[origin: WO2017048629A1] The invention provides specific anti-Cathepsin G antibodies that are capable of inducing formation of anti-inflammatory macrophage. The invention also provides methods for generating anti-inflammatory macrophages. The methods involve contacting bone marrow cells or monocytes with a Cathepsin G antibody described herein, and culturing the cell mixture under conditions to allow formation of M2 macrophage. Also provided in the invention are therapeutic methods of using a pharmaceutical composition containing a Cathepsin G antibody or induced M2 macrophage described herein for treating autoimmune diseases and other disorders associated with undesired immune responses.

IPC 8 full level

**C07K 16/40** (2006.01); **A61K 35/12** (2015.01); **A61K 35/15** (2015.01); **A61K 49/16** (2006.01); **C12N 5/0786** (2010.01)

CPC (source: EP)

**A61K 39/4614** (2023.05); **A61K 39/4621** (2023.05); **A61K 39/4622** (2023.05); **A61K 39/46433** (2023.05); **A61P 37/06** (2018.01); **C07K 16/40** (2013.01); **C12N 5/0645** (2013.01); **A61K 2039/505** (2013.01); **C07K 2317/21** (2013.01); **C07K 2317/622** (2013.01); **C07K 2317/64** (2013.01); **C07K 2317/70** (2013.01); **C07K 2317/74** (2013.01)

Citation (search report)

- [X] KEITH M SKUBITZ ET AL: "Preparation and Characterization of Monoclonal Antibodies to Human Neutrophil Cathepsin G, Lactoferrin, Eosinophil Peroxidase, and Eosinophil Major Basic Protein", JOURNAL OF LEUKOCYTE BIOLOGY, 1 January 1989 (1989-01-01), pages 109 - 118, XP055535628, Retrieved from the Internet <URL:https://jlb.onlinelibrary.wiley.com/doi/pdf/10.1002/jlb.46.2.109> [retrieved on 20181217]
- [X] DAVID G LOMAS ET AL: "The Control of Neutrophil Chemotaxis by Inhibitors of", J. BIOL. CHEM., 1 January 1995 (1995-01-01), pages 23437 - 23443, XP055535631, Retrieved from the Internet <URL:http://www.jbc.org/content/270/40/23437.full.pdf> [retrieved on 20181217]
- [X] NAUDER FARADAY ET AL: "Cathepsin G-Dependent Modulation of Platelet Thrombus Formation In Vivo by Blood Neutrophils", PLOS ONE, vol. 8, no. 8, 5 August 2013 (2013-08-05), pages e71447, XP055535633, DOI: 10.1371/journal.pone.0071447
- [X] PAOLO CONROTTO ET AL: "Identification of new accessible tumor antigens in human colon cancer by ex vivo protein biotinylation and comparative mass spectrometry analysis", INTERNATIONAL JOURNAL OF CANCER, JOHN WILEY & SONS, INC, US, vol. 123, no. 12, 15 December 2008 (2008-12-15), pages 2856 - 2864, XP002663352, ISSN: 0020-7136, [retrieved on 20080916], DOI: 10.1002/IJC.23861
- [X] NADINE JETTEN ET AL: "Anti-inflammatory M2, but not pro-inflammatory M1 macrophages promote angiogenesis in vivo", ANGIOGENESIS, vol. 17, no. 1, 8 September 2013 (2013-09-08), NL, pages 109 - 118, XP055535574, ISSN: 0969-6970, DOI: 10.1007/s10456-013-9381-6
- [I] B. KORKMAZ ET AL: "Neutrophil Elastase, Proteinase 3, and Cathepsin G as Therapeutic Targets in Human Diseases", PHARMACOLOGICAL REVIEWS, vol. 62, no. 4, 15 November 2010 (2010-11-15), US, pages 726 - 759, XP055535637, ISSN: 0031-6997, DOI: 10.1124/pr.110.002733
- [I] RICHARD A. LERNER ET AL: "Antibodies from combinatorial libraries use functional receptor pleiotropism to regulate cell fates", QUARTERLY REVIEWS OF BIOPHYSICS., vol. 48, no. 04, 16 July 2015 (2015-07-16), pages 389 - 394, XP055238228, ISSN: 0033-5835, DOI: 10.1017/S0033583515000049
- See also references of WO 2017048629A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2017048629 A1 20170323**; AU 2016324021 A1 20180412; EP 3349768 A1 20180725; EP 3349768 A4 20190123

DOCDB simple family (application)

**US 2016051290 W 20160912**; AU 2016324021 A 20160912; EP 16847105 A 20160912